

REMARKS

Applicant's attorney is appreciative of the interview granted by Examiners Lewis and Patel on June 17, 2009. At that interview, the rejection of the claims under 35 USC 103(a) as obvious over Hakansson et al in view of the Casey reference was discussed. Applicant's attorney presented a diagram comparing application of a device according to the Casey reference with application of a device according to the invention

As noted at the interview, while the Casey reference may show an element which could be designated as a "protective element" with an integral fixing means, Casey clearly did not show a protective element covering or enveloping the end of an arch, and fixed to the bracket system surrounding the molar tube behind flaps thereof.

Agreement was not reached; Examiner Patel maintained that the invention remained obvious over Hakansson et al in view of Casey.

With regard to the prior art discussed, Hanansson et al discloses an orthodontic appliance including an arch, brackets and molar tubes, with the arch end projecting from a distal end of a molar tube. No protective devices are disclosed.

The disclosure for which Hakansson et al has been cited has already been admitted by Applicant to be old in the art.

Casey discloses a wire end protection cap assembly used to protect the twisted ends of a ligature wire, as clearly set forth at col. 1, lines 28-32.

Applicant now submits Exhibits A and B appended hereto to better explain the differences between the invention and the cited references. Both exhibits include photographs of an orthodontic appliance within the mouth of a patient.

Reference is made to Exhibit A1 appended hereto, showing metallic ligature wires, as are discussed by Casey.

Exhibit A2 shows a typical prior art installation, including a molar tube, brackets, an arch projecting from the distal end of the molar tube, and a ligature wire secured to a bracket. Ligature wires are placed around each bracket to secure the arch to the bracket.

In Exhibit A3, the ligature wires are twisted together to retain the arch in the bracket. The ends of the ligature wires remain exposed, creating a problem as described in Casey, col. 1, lines 9-19.

To remedy the problem of the exposed ligature wires, Casey proposes to use a cap assembly. The cap assembly shown in Figs. 9 and 10 is discussed in the Office Action, and utilizing the device shown, the ligature wires pass through the loop, are twisted together and are retained in the cap.

In contrast, the protective device of the invention, shown in Exhibit B1, is placed at the end of the arch, as shown in Exhibit B2. The arch end is retained in the pocket of the device. However, the loop is secured to the bracket to complete the installation, preventing the protective device from falling off the end of the arch.

Retaining the arch end in the pocket of a protective device is not disclosed or suggested by Casey.

Securing a protective device by attaching the loop to the bracket is also not disclosed or suggested by Casey. Indeed, it is not necessary in the embodiment of Figs. 9 and 10 of Casey, since passing the wires through the loop secures the protective device.

Used for a different purpose, protecting the arch end, the protective device of the invention requires a means for securing the device, and Applicant has solved that problem by attaching the loop to the bracket.

Neither Applicant's problem nor Applicant's solution to the problem is disclosed by Casey, and the invention is

therefore patentable over the state of the art (represented by Hakansson et al) in view of Casey.

Withdrawal of this rejection is requested.

In view of the foregoing amendments and remarks, Applicant submits that the present application is now in condition for allowance. An early allowance of the application with amended claims is earnestly solicited.

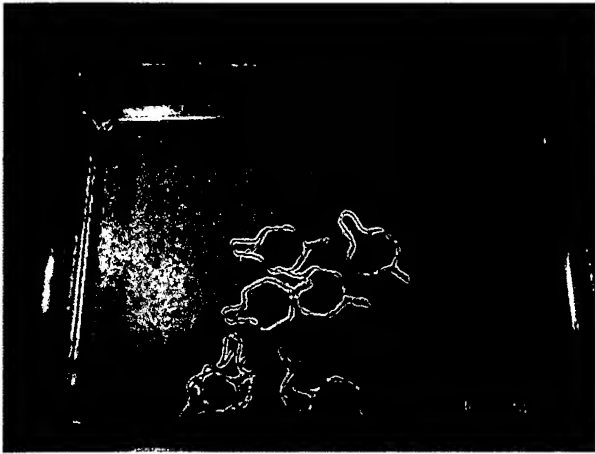
Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Ira J. Schultz', written in a cursive style.

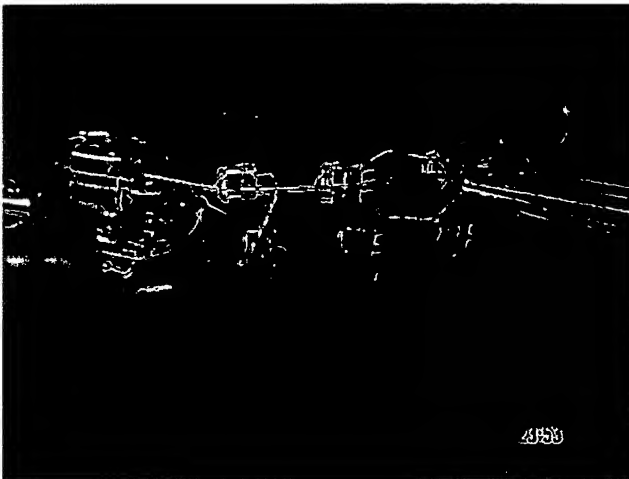
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Exhibit A



Ex. A1: Metallic ligature wires, as disclosed in Casey reference.

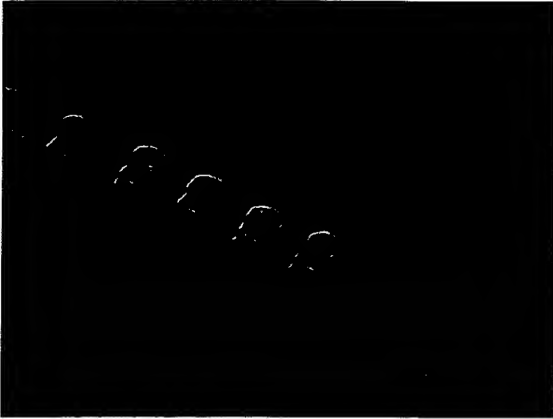


Ex. A2: Metallic ligature wire secured to bracket. Arch end projects from molar tube.

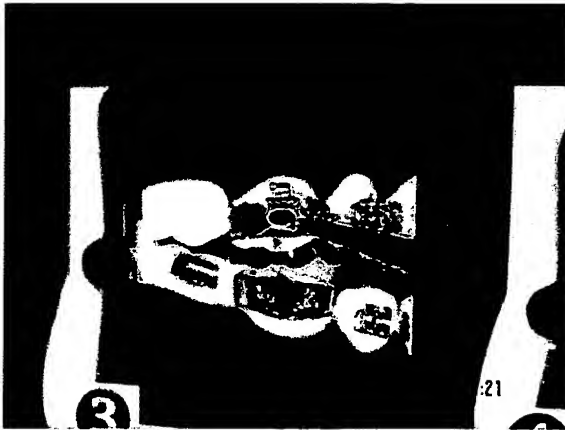


Ex. A3: Metallic ligature wires are twisted together to retain arch in bracket. Ends of ligature wires remain exposed in mouth, and may be covered by cap according to Casey.

Exhibit B



Ex. B1: Protective devices according to the invention.



Ex. B2: Installation of protective device of invention at end of arch, with loop retained on bracket.